

WHAT IS CLAIMED:

1. A computerized method for administering a variable annuity benefit plan having a guaranteed minimum payment feature, and for periodically determining the amount of a current benefit payment to be made to a beneficiary under the plan, comprising the steps of:
  - a) storing data relating to a variable annuity account, including data relating to an account value, a guaranteed minimum payment, an assumed investment rate, a payout term and a period of benefit payments;
  - b) determining an initial benefit payment amount;
  - c) periodically determining an amount of a current benefit payment to be made under the plan, and comparing the amount determined with the guaranteed minimum payment;
  - (d) adjusting the amount of the periodically determined current benefit payment upwardly to the guaranteed minimum payment if the periodically determined amount is less than the guaranteed minimum payment;
  - e) maintaining a cumulative total of actual payments made under the benefit plan;
  - (f) adjusting the amount of the periodically determined current benefit payment downwardly if the periodically determined amount is greater than the guaranteed minimum payment, and the cumulative total of actual payments exceeds a cumulative total of the initial payment and the periodically determined current benefit payments; and
  - g) paying the adjusted amount of the current benefit payment to the beneficiary.

2. The method of Claim 1, wherein the amounts of the periodic current benefit payments are determined by the following formula:

$$\text{Benefit}_{t+1} = \text{Benefit}_t \times \left[ \frac{1+i}{1+AIR} \right]^{\frac{1}{p}}$$

where:  $\text{Benefit}_{t+1}$  = dollar amount of variable annuity benefit at time t+1  
 $\text{Benefit}_t$  = dollar amount of variable annuity benefit at time t  
 $i$  = actual fund performance during period t to t+1 (as a %)  
 $AIR$  = assumed investment rate  
 $p$  = the period of benefit payments

3. The method of Claim 1, further comprising the step of periodically redetermining the account value in accordance with the following formula:

$$\text{Account Value}_{t+1} = (\text{Account Value}_t - \text{Benefit}_t) \times (1 + i) \times (1 / p_y)$$

where:  $\text{Account Value}_{t+1}$  = Account value at time t+1  
 $\text{Account Value}_t$  = Account value at time t  
 $\text{Benefit}_t$  = dollar amount of variable annuity benefit at time t  
 $i$  = actual fund performance during period t to t+1 (as a %)  
 $p_y$  = probability annuitant age y survives to age y+1

4. A data processing method for administering a variable annuity benefit account, comprising the steps of:

- a. storing data relating to the variable annuity benefit account, including data relating to an account value at the time of annuitization and an initial benefit payment;
- b. periodically recalculating a current benefit payment;
- c. periodically recalculating the account value;
- d. monitoring the account value balance and any withdrawals made by an annuitant;
- e. comparing a withdrawal rate by which the account value is decreased by annuitant withdrawals with a predetermined maximum withdrawal rate; and

~~4.~~ making benefit payments in accordance with the calculation set forth in step b. so long as;

- 1) the withdrawal rate is less than the predetermined maximum withdrawal rate, or
- 2) the account value balance is greater than zero.

~~5.~~ The method of Claim 4, wherein the current benefit payment is determined by the following formula:

$$\text{Benefit}_{t+1} = \text{Benefit}_t \times \left[ \frac{1+i}{1+AIR} \right]^{\frac{1}{p}}$$

where:  $\text{Benefit}_{t+1}$  = dollar amount of variable annuity benefit at time t+1  
 $\text{Benefit}_t$  = dollar amount of variable annuity benefit at time t  
 $i$  = actual fund performance during period t to t+1 (as a %)  
 $AIR$  = assumed investment rate  
 $p$  = the period of benefit payments

~~6.~~ The method of Claim 4, wherein the account value is recalculated in accordance with the following formula:

$\text{Account Value}_{t+1} = (\text{Account Value}_t - \text{Benefit}_t) \times (1+i) \times (1/p_y)$   
where:  $\text{Account Value}_{t+1}$  = Account value at time t+1  
 $\text{Account Value}_t$  = Account value at time t  
 $\text{Benefit}_t$  = dollar amount of variable annuity benefit at time t  
 $i$  = actual fund performance during period t to t+1 (as a %)  
 $p_y$  = probability annuitant age y survives to age y+1

ADD A<sub>1</sub>